

IN THE CLAIMS:

Please amend claims 1-14 as follows:

1. (Amended) A piezoelectric resonator comprising:

a piezoelectric resonator element [comprising] having a piezoelectric body [having] and an electrode formed on a surface of the piezoelectric body;

a supporting member supporting said piezoelectric resonator element; and

a plurality of leads mechanically connecting said piezoelectric resonator element to said supporting member and permitting electrical connection thereof, [; wherein] each of said leads [is] being provided with a flat leading end portion which opens in a substantially [a U shape] U-shaped opening toward a leading end, [connectable] connected substantially in parallel with said electrode, said electrode opposing one surface of said piezoelectric resonator element, and a connecting layer [is] being formed with a conductive resin between the leading end portion and said electrode, and

[wherein] said piezoelectric resonator element [is] being supported by said leads so that a gap is formed between said supporting member and said piezoelectric resonator element.

2. (Amended) The piezoelectric resonator according to claim 1, [wherein] said piezoelectric resonator element [is] being attached to said leads to an end of the substantially U-shaped opening of said leading end portion on a side facing said supporting member, so that an edge of said piezoelectric resonator element on the side facing said supporting member may be positioned at said end of the substantially U-shaped opening.

3. (Amended) The piezoelectric resonator according to claim 1, [wherein] said [substantially flat] leading end portion [has] having a tapered cross-section converging toward the leading end thereof.

4. (Amended) The piezoelectric resonator according to claim 1, further comprising a [temporary] fixing layer made of a UV-setting type resin coated thereunto so as

to [temporarily] fix the leading end portion of said leads and said piezoelectric resonator element prior to forming said connecting layer, [and

wherein] said connecting layer [is] being formed with a conductive resin at least injected into a gap between said leading end portion and said electrode.

5. (Amended) The piezoelectric resonator according to claim 4, [wherein] said [temporary] fixing layer [is] being formed on a side of one lead facing an adjacent lead.

6. (Amended) The piezoelectric resonator according to claim 1, [wherein,] prior to connecting said leading end portion and said electrode, said connecting layer [is] being formed with a conductive resin coated onto said leading end portion or said electrode.

7. (Amended) The piezoelectric resonator according to claim 1, [wherein] said connecting layer [is] being provided with a reinforcing layer of a conductive resin or a non-conductive resin coated so as to cover at least said connecting layer and the leading end portion of said leads.

8. (Amended) A method for manufacturing a piezoelectric resonator comprising:

[when] attaching a piezoelectric resonator element comprising a piezoelectric body having an electrode formed thereon, to a plurality of leads which connect said piezoelectric resonator element mechanically to a supporting member and permit electrical connection thereof[, a connecting step of:];

providing a gap between said supporting member and said piezoelectric resonator element; and

forming a connecting layer of a conductive resin [in a gap] between said electrode and flat leading end portions of said leads, [connectable] connected substantially in parallel with said electrode, opening in substantially a U shape toward a leading end thereof, said electrode opposing one surface of said piezoelectric resonator element.

9. (Amended) The method for manufacturing a piezoelectric resonator according to claim 8, [wherein said connecting step comprises] forming said connecting layer comprising:

[a first step for] forming a [temporary] fixing layer by coating a UV-setting type resin onto at least a part of the leading end portions of said leads and said piezoelectric resonator element; and

[a second step for] forming the connecting layer by injecting the conductive resin at least into the gap between said electrode and said leading end portions.

10. (Amended) The method for manufacturing a piezoelectric resonator according to claim 9, [wherein, in said first step,] said UV-setting type resin [is] being coated onto a side of one lead facing an adjacent lead.

11. (Amended) The method for manufacturing a piezoelectric resonator according to claim 8, [wherein, in said connecting step,] prior to connecting said leading end portions to said electrode, said connecting layer [is] being formed with the conductive resin coated onto said leading end portions or said electrode.

12. (Amended) The method for manufacturing a piezoelectric resonator according to claim 8, [wherein said method includes a reinforcing step of] further comprising forming a reinforcing layer with a conductive resin or a non-conductive resin coated so as to cover at least said connecting layer and the leading end portions of said leads.

13. (Amended) The method for manufacturing a piezoelectric resonator according to claim 12, [wherein] said conductive resin or non-conductive resin used in [said] reinforcing [step has] having a higher viscosity than that of said conductive resin used in [said] connecting [step].

14. (Amended) A piezoelectric resonator unit having [the] a piezoelectric resonator, [according to claim 1] and a hollow protector, the piezoelectric resonator comprising:

a piezoelectric resonator element having a piezoelectric body and an electrode formed on a surface of the piezoelectric body;

a supporting member supporting said piezoelectric resonator element; and

a plurality of leads mechanically connecting said piezoelectric resonator element to said supporting member and permitting electrical connection thereof each of said leads being provided with a flat leading end portion which opens in a substantially U-shaped opening toward a leading end, connected substantially in parallel with said electrode, said electrode opposing one surface of said piezoelectric resonator element, and a connecting layer being formed with a conductive resin between the leading end portion and said electrode, and

said piezoelectric resonator element being supported by said leads so that a gap is formed between said supporting member and said piezoelectric resonator element,
[wherein]

said piezoelectric resonator [is] being inserted, and sealed by said supporting member and said protector.

Please add the following claims:

--15. A piezoelectric resonator unit according to claim 14, said piezoelectric resonator element being attached to said leads to an end of the substantially U-shaped opening of said leading end portion on a side facing said supporting member, so that an edge of said piezoelectric resonator element on the side facing said supporting member may be positioned at said end of the substantially U-shaped opening.--

--16. The piezoelectric resonator unit according to claim 14, said leading end portion having a tapered cross-section converging toward the leading end thereof.--

--17. The piezoelectric resonator unit according to claim 14, further comprising a fixing layer made of a UV-setting type resin coated thereunto so as to fix the leading end portion of said leads and said piezoelectric resonator element prior to forming said connecting layer, and said connecting layer being formed with a conductive resin at least injected into a

gap between said leading end portion and said electrode.--

--18. The piezoelectric resonator unit according to claim 17, said fixing layer being formed on a side of one lead facing an adjacent lead.--

--19. The piezoelectric resonator unit according to claim 14, prior to connecting said leading end portion and said electrode, said connecting layer being formed with a conductive resin coated onto said leading end portion or said electrode.--

--20. The piezoelectric resonator according to claim 14, said connecting layer being provided with a reinforcing layer of a conductive resin or a non-conductive resin coated so as to cover at least said connecting layer and the leading end portion of said leads.--

--21. A method for manufacturing a piezoelectric resonator unit comprising:

attaching a piezoelectric resonator element comprising a piezoelectric body having an electrode formed thereon, to a plurality of leads which connect said piezoelectric resonator element mechanically to a supporting member and permit electrical connection thereof;

providing a gap between said supporting member and said piezoelectric resonator element;

forming a connecting layer of a conductive resin between said electrode and flat leading end portions of said leads, connected substantially in parallel with said electrode, opening in substantially a U shape toward a leading end thereof, said electrode opposing one surface of said piezoelectric resonator element;

inserting the piezoelectric resonator element connected to said supporting member into a hollow protector; and

sealing the piezoelectric resonator by said supporting member and said protector.--

--22. A method for manufacturing a piezoelectric resonator unit according to claim 21, forming said connecting layer comprising:

forming a fixing layer by coating a UV-setting type resin onto at least a part of the leading end portions of said leads and said piezoelectric resonator element; and

forming the connecting layer by injecting the conductive resin at least into the gap between said electrode and said leading end portions.--

--23. The method for manufacturing a piezoelectric resonator unit according to claim 22, said UV-setting type resin being coated onto a side of one lead facing an adjacent lead.--

--24. The method for manufacturing a piezoelectric resonator unit according to claim 21, prior to connecting said leading end portions to said electrode, said connecting layer being formed with the conductive resin coated onto said leading end portions or said electrode.--

--25. The method for manufacturing a piezoelectric resonator unit according to claim 21, further comprising forming a reinforcing layer with a conductive resin or a non-conductive resin coated so as to cover at least said connecting layer and the leading end portions of said leads.--

--26. The method for manufacturing a piezoelectric resonator according to claim 25, said conductive resin or non-conductive resin used in reinforcing having a higher viscosity than that of said conductive resin used in connecting.

REMARKS

Claims 1-26 are pending. By this Amendment, claims 1-14 are amended and claims 15-26 are added.

Applicant notes that amendments under Article 19 were filed in the international application. However, Applicant requests that the Article 19 amendments not be entered in the U. S. National Stage Application and that the preliminary amendments set forth above instead be entered.